

## Aggression among adolescents: The role of emotion regulation

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### ABSTRACT

Aggressive behavior expressed by adolescents is a worrying phenomenon. There might be circumstances underlying this aggression, such as adaptive or maladaptive emotional conditions. To study the role of emotion regulation toward aggression on adolescents, the researchers performed quantitative correlational research toward 943 secondary school students in the Special Province of Yogyakarta. Data was collected using an emotion regulation scale and an aggression scale. The data was then examined using multiple regression analysis to observe the correlation among variables. The result of this research shows that emotion regulation significantly influences the development of aggression. Further analysis of two strategies on emotion regulation shows that excessive emotion suppression affects the development of aggression, while emotion regulation through cognitive appraisal does not. The implication of this research is emotion regulation through emotion suppression has a more significant influence on the development of aggression on adolescents compared to cognitive appraisal. The stronger emotion suppression method is employed, the higher the level of aggression might be developed.

### Introduction

Adolescence is a period of transition, from childhood into adulthood. During this period, adolescents might face challenges that will affect both their internal development and their external relationship with other people. The research suggested that external troubles faced by adolescents, which might develop into aggressive behaviors, are the result of negative parental control and peer pressures ([Banny, Heilbron, Ames, & Prinstein, 2011](#); [De-Clercq, Van-Leeuwen, De-Fruyt, Van-Hiel, & Mervielde, 2008](#)).

[Willis \(2013\)](#) opined that aggression possesses emotional and motivational dimensions. Looking aggression from an emotional perspective, it is the result of impending anger. While from a motivational standpoint, aggression is an action that is intended to hurt other people. There are four forms of aggressive behavior: physical aggression, verbal aggression, anger aggression, and hate aggression. These forms of aggression are then manifested into the three dimensions of psychomotor, affective, and cognitive ([Buss & Perry, 1992](#)).

The expression of aggressive behaviors occurred in many countries, each with varying and more complex expressions ([Goldstein, 2003](#); [May, 2008](#)). In US, for example, 72.6% of 63 study participants in correctional population have performed criminal acts involving physical violence, while 27.84% of them have the tendencies to commit criminal acts without physical violence ([Shelton, Sampl, Kesten, Zhang, & Trestman, 2009](#)). Also in the USA,

research showed that out of 1,339 their adolescent respondents who conducted adolescent-to-parent violent, 72% had performed physical violence to their mothers, while 28% have attacked or threatened their fathers ([Routt & Anderson, 2011](#)).

In Indonesia, various researches showed that aggressive behavior is a classic problem performed by adolescents. A study conducted in Padang showed that aggression on adolescents was expressed through specific actions such as physically hurting other people, verbally attacking other people, performing vandalism on other people's belongings ([Hidayat, Yusri, & Ilyas, 2013](#)). Another research observing students in Yogyakarta showed that 51% of the respondents were on the medium level to the very high level of aggression, while the rest were on the low and the very low levels ([Alhadi, Purwadi, Muyana, Saputra, & Supriyanto, 2018](#)). Aggression on students in Yogyakarta was then expressed through *klitih* actions. *Klitih* is a local terminology encompassing aggressive behaviors, in which the perpetrators inflict harm toward other people, such as school fights or random violence that might kill the victim ([Febriani, 2015](#)).

Some studies seek to understand the underlying factors of such aggression. One such study's result showed that the underlying factors of aggression on children are the identification of a family member(s) with aggressive or violent behaviors, in conducive environment, or lacking cooperative efforts between school and parents to overcome the aggression on the said child ([Arriani, 2014](#)). Other than those, there might be internal factors prompting the development of aggression, such as the ability to regulate emotion.

According to various study, aggression in adolescents is a problem related to the inability to regulate one's emotion ([García-Sancho, Salguero, & Fernández-Berrocal, 2017](#); [Huesmann et al., 2017](#); [Sullivan, Garthe, Goncey, Carlson, & Behrhorst, 2017](#); [Valois, Zullig, & Revels, 2017](#)). The ability to regulate one's emotion will correlate with positive attitudes on an adolescent's life, such as supporting their academic success ([Gage, Adamson, MacSuga-Gage, & Lewis, 2017](#); [Shah, Sanisara, Mehta, & Vaghela, 2017](#); [Sointu, Savolainen, Lappalainen, & Lambert, 2017](#); [Wigelsworth, Qualter, & Humphrey, 2017](#)). On the contrary, the inability to regulate one's emotions might promote the development of maladaptive behaviors on the adolescent ([Brackett, Reyes, Rivers, Elbertson, & Salovey, 2011](#); [Renati, Cavionia, & Zanetti, 2011](#)).

Research on children age four to eleven years old indicated that emotion regulation affected the development of aggression on girls ([Bowie, 2010](#)). Another experiment on male students age seven to twelve years old with aggression issues showed that the process to monitor and regulate emotion could diminish aggression ([De-Castro, Bosch, Veerman, & Koops, 2012](#)). Inquiry on adolescents age eleven to fourteen years old resulted in the opinion that emotion regulation significantly affected aggression ([Amanda, Sulistyaningsih, & Yusuf, 2018](#)). A study on adolescents in Spain revealed the importance of emotion regulation ability in intervening with aggression issues. It was revealed that emotion regulation is capable of moderating the causal effect of anger and aggression ([Calvete & Orue, 2012](#)).

Regulating self emotion has positive effects on a person's emotional development. Emotion regulation is an internal mechanism to adjust someone's condition toward the demands of their environment ([Jarymowicz & Imbir, 2015](#)). [Gross \(2015\)](#) defined emotion regulation as a process within an individual to adjust the types of emotion that a person possesses, the time of possession, how to experience the feeling, and how to express them. There are two strategies on emotion regulation: cognitive appraisal and emotion suppression ([Gross & John, 2003](#)).

Based on problems on aggression explained above, this research seeks to apprehend the role of emotion regulation toward aggression on secondary school students in the Special Region of Yogyakarta. Specifically, this research aims to explore which emotion regulation strategy has more influence on aggression, whether cognitive appraisal or emotion suppression.

## Method

### *Respondent*

This research applied a quantitative correlational approach. The population of this research was the secondary school students in the Special Region of Yogyakarta. This research collected data from 934 students selected using cluster random sampling method.

### *Instrument*

This research used emotion regulation scale and aggression scale to collect data from the respondents. The authors utilized the theory articulated by [Gross & John \(2003\)](#) as the foundation to develop an emotion regulation scale. At the same time, the theory articulated by [Buss & Perry \(1992\)](#) was used to develop an aggression scale. [Buss & Perry \(1992\)](#) argued that aggression consists of verbal, physical, anger, and hate. This argument is incorporated into the scale. The development of the scales also took into account the multicultural background of the research subjects. The result of the reliability test showed Cronbach Alpha for emotional regulation inventory as .765, while for aggression inventory as .902.

### *Data Analysis*

This research employed multiple regression analyses to determine the influence of emotional regulation on aggression. The analyses were performed using SPSS for Windows. Afterward, a follow-up analysis was executed to compare the contribution of the two types of emotion regulation strategies, cognitive appraisal strategy, and emotion suppression strategy, toward aggression.

## Results

[Table 1](#) shows the result of the data analysis conducted on this research. As shown in [Table 1](#), emotion regulation is able to predict aggression significantly. Emotion regulation contributed 4% toward aggression.

Table 1

*Regression Analysis on the Influence of Emotion Regulation toward Aggression*

Statistic	Value
<i>F</i>	27.073
<i>p</i>	.000
<i>R</i>	.203
<i>R</i> <sup>2</sup>	.040

The follow-up analysis was then performed by differentiating the two emotion regulation strategies and comparing their influence toward aggression. The result of this step is shown in [Table 2](#). The result showed that the cognitive appraisal strategy does not indicate any contribution toward aggression. Meanwhile, the emotion suppression strategy suggests a significant contribution toward aggression.

Table 2

*Regression Analysis on Strategies of Emotion Regulation toward Aggression*

Type of Strategy	R	Adjusted R <sup>2</sup>	p	Contribution
Cognitive Appraisal	.082	.006	.120	No contribution
Emotion Suppression	.203	.039	.000	Significant contribution

## Discussion

The results of this research suggest that emotion regulation has a significant influence on students' aggression. Emotion regulation, therefore, is an essential factor that might be able to control aggression on students. The better a person's ability to regulate emotion, the possibility for the person to develop aggression is lessened. On the contrary, the worse a person's ability to regulate emotion, the potential for the person to develop aggression is increased.

There are three skills underlying emotion regulation, which are emotional clarity, emotional acceptance, and the capability to employ strategies to regulate emotion ([Robertson, Daffern, & Bucks, 2012](#)). These three skills can increase a person's ability to adjust their emotion adaptively. Thus, when a person experiences a particular event, they will be able to adapt their emotion accordingly and reduce the chance of developing aggression. Therefore, students must develop these three skills to regulate their emotions and lessen the possibility of them developing aggression.

School counselors have an essential role in nurturing students' mental wellbeing through establishing approaches according to their competence as school counselors. Counselors are also able to intervene more directly using the school's counseling program ([Collins, 2014](#)). To address the causes of aggression on students, school counselors need to train the students on emotion regulation so that students can develop their strategies to regulate their emotions. The skills of emotion regulation come with practices; thus, training and coaching are essential to reduce aggressiveness among the students.

The result of this research is in line with the outcome of previous studies. One such study indicated that the relationship between mental illness symptoms and psychological and physical aggression is mediated by the difficulty of regulating ([Scott, Stepp, & Pilkonis, 2014](#)). Another research described that emotional dysregulation fully mediates the relation between low self-esteem with physical aggression, anger, and animosity ([Garofalo, Holden, Zeigler-Hill, & Velotti, 2016](#)). Therefore, this research then posits that a proper strategy on emotion regulation safeguards students from developing aggression.

The subsequent result of this research demonstrates that one of the emotion regulation strategies significantly influence aggression. This result is in line with previous research, such as the one that observed secondary students in Greece. The result of that research was that emotion suppression has a positive correlation with reactive aggression ([Kokkinos, Algiovoglou, & Voulgaridou, 2019](#)). Emotion suppression is one of the strategies to regulate emotion. Using this strategy, a person consciously delayed the expression of their emotional conditions ([Gross & Levenson, 1993](#)). This research assessed secondary students from the Special Region of Yogyakarta. Most, if not all, of these respondents, were raised in Javanese cultural environment, which considers strong emotional expression as less favorable or even considers it downright rude ([Subandi, 2011](#)). Even though emotion suppression can be useful in repressing the expression of negative emotion experienced by a person, yet the repressive efforts might cause the person to experience more negative emotions ([Srivastava, Tamir, McGonigal, John, & Gross, 2014](#)).

The result of this research shows that cognitive appraisal, the other strategy of emotion regulation, does not contribute to aggression. Cognitive appraisal is a strategy of emotion regulation that focuses on the strategy to change a person's emotions using cognitive

reasoning. A person performs cognitive appraisal by using their cognition to reinterpret the situation triggering the emotions to change the emotional impact that they feel ([Gross & John, 2003](#)). Since the respondents of this research were adolescent students, it is imperative to take into account that among adolescents, peer acceptance is fundamental and might affect their ability to control their cognition. A study on adolescents age eleven to nineteen years old demonstrated that when observed by their peers, the part of their brains that regulate cognitive appraisal weakens. At the same time, the part of their brains that correlate with appreciation is more active than usual, indicating that adolescents desire social acceptance from their peers ([Chein, Albert, O'Brien, Uckert, & Steinberg, 2011](#)). This condition lessens an adolescent's ability to perform cognitive appraisal.

There are limitations to this research. The first limit is that this research explores the role of emotion regulation, which is an internal variable, with aggression. This research does not take into account external variables such as parental engagements, peer pressure, and environmental conditions, and their influence toward aggression. The second is that this research limits itself on the sample based on the population of secondary students in the Special Region of Yogyakarta, meaning that the respondents shared a strong cultural background. Thus, to overcome this limitation, future research should apply the result of this research cautiously to other ethnic groups outside of the Special Region of Yogyakarta.

## Conclusion

Emotion regulation on students is shown to be able to predict aggression. The strategy of emotion suppression correlates with the development of aggression in secondary students. The more a student suppress their emotion, the chance that they will develop aggression is higher, and vice versa. Thus, it is crucial to provide students who experience aggression issues with counseling and training to regulate their emotions.

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